Listing of Claims

1.   (Previously Presented) A method of searching for information in a mobile communication system, comprising:

determining if a target IP address is an active address;

if the target IP address is an active address, determining if a packet call corresponding to the target IP address exists in a packet data protocol context database;

if the target IP address does not exist in the packet data protocol (PDP) context database, setting a trigger flag for the target IP address; and

performing at least one of a tracing or monitoring operation for the packet call or target IP address based on the set trigger flag.

2.   (Canceled)

3.   (Currently Amended) The method of claim 3 [[2]], wherein the internet protocol address is one of:

a static internet protocol address; or

a dynamically allocated internet protocol address.

4.   (Original) The method of claim 1, wherein said searching is responsive to a request from a network management center including identification of the network address.

5.   (Original) The method of claim 4, wherein the request from the network

management center is responsive to a request from an internet protocol network including

identification of the network address.

6-11   (Canceled)

12.   (Previously Presented) The method of claim 1, wherein if it is determined that the

target IP address exists in the packet data protocol context database, then performing at least

one of tracing or monitoring of the packet call or the target IP address without setting said

trigger flag for the target IP address.

13.   (Previously Presented) The method of claim 1, further comprising: transmitting

results of said at least one of tracing or ~~and~~ monitoring the target IP address.

14.   (Original) The method of claim 13, wherein said transmitting is to a network

management center.

15.   (Canceled)

16. (Previously Presented) The method of claim 1, wherein a serving GPRS support node implements one or more of the determining, setting, or performs steps.

17. (Previously Presented) The method of claim 1, wherein a gateway GPRS support node implements one or more of the determining, setting, or performs steps.

18. (Previously Presented) An apparatus comprising:

an interface to an internet protocol network; and

a means for tracing or monitoring a packet call of a mobile communication subscriber who has connected to the internet protocol network through the interface, wherein said means includes a processing circuit to:

check if a target IP address is an active address;

if the target IP address is an active address, determining if a packet call corresponding to the target IP address exists in a packet data protocol context database;

if the target IP address does not exist in the packet data protocol (PDP) context database, setting a trigger flag for the target IP address and tracing or monitoring the packet call based on the set trigger flag.

19. (Canceled)

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20.   (Currently Amended) A method of tracing or monitoring a call in a mobile

communication system provided with a network management center and a serving general

packet radio service (GPRS) support node (SGSN), the method comprising:

transmitting a target Internet protocol (IP) address subject to a request for tracing

or monitoring to the network management center of the mobile communication system;

requesting packet call tracing or monitoring of the target IP address to the SGSN;

tracing or monitoring, in the SGSN, the packet call of the target IP address; and

transmitting a result of the packet call tracing or monitoring to the network

management center, wherein said tracing or monitoring includes:

checking whether the target IP address is an effective IP address in a network to

which a corresponding subscriber belongs; and

if it is checked that the target IP address is the effective IP address, activating the

call tracing or monitoring of the target IP address, said method further comprising:

deactivating the packet call tracing or monitoring after a predetermined period of

time, said deactivating including:

receiving input of the target IP address subject to inactivation through the

network management center;

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checking whether the packet call tracing or monitoring of the target IP address is

in an active state; and

if it is checked that the packet call tracing or monitoring of the target IP address is

in the active state, terminating the activation and transmitting a result of the inactivation, and

wherein:

if it is checked that the packet call tracing or monitoring corresponding to the

target IP address is in the inactive state, checking whether a trigger flag for the tracing and

monitoring of the target IP is set; and

if it is checked that the trigger flag is set, removing the trigger flag and terminating

tracing or monitoring of the packet call of the target IP address.

21.   (Canceled)

22.   (Previously Presented) The method of claim 20, further comprising:

if it is checked that the target IP address is not the effective IP address in the

network to which the corresponding subscriber belongs, returning the system to a state before

the request for tracing and monitoring of the target IP address is produced in the IP network.

23.   (Previously Presented) The method of claim 20, wherein activating the packet call

tracing and monitoring of the target IP address comprises:

judging whether the packet call having the target IP address exists in a packet data

protocol context database stored in the SGSN; and

if it is judged that the packet call having the target IP address exists in the packet

data protocol context database, starting the packet call tracing or monitoring of the target IP

address.

24.   (Previously Presented) A method tracing or monitoring a call in a mobile

communication system, comprising:

transmitting a target Internet protocol (IP) address subject to a request for tracing

or monitoring to a network management center;

requesting packet call tracing or monitoring of the target IP address to an SGSN;

tracing or monitoring the packet call of the target IP address; and

transmitting a result of the packet call tracing or monitoring to the network

management center, wherein said call tracing or monitoring of the target IP address is activated

by:

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determining that the packet call having the target IP address does not exist in a

packet data protocol context database,

setting a trigger flag of the target IP address, and

if the packet call having an IP address with the set trigger flag exists in the packet

data protocol context database, starting the packet call tracing or monitoring of the target IP

address.

25.   (Currently Amended) The method of claim 20, wherein performing the packet call

tracing or monitoring includes at least one of:

checking whether a request or change of the packet call has occurred,

checking whether a request for release of the packet call has been made; or

checking whether a protocol which involves one or more messages have been

transmitted between the SGSN and a mobile station.

26.   (Previously Presented) The method of claim 25, wherein the one or more

messages transmitted between the SGSN and the mobile station includes at least one of an active

packet data protocol (PDP) context request message that is transmitted from the mobile station

to the SGSN or an active PDP context request response message that is transmitted from the

SGSN to the mobile station.

27-30 (Canceled)

31.   (Currently Amended) The method of claim 20 [[30]], wherein inactivating the

packet call tracing or monitoring of the target IP address further comprises:

if it is checked that the trigger flag for the call tracing and monitoring of the target

IP address is not set, returning the mobile communication system to a state that existed before

an address of the target IP address subject to inactivation is inputted to the network

management center.

32.   (Canceled)